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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,722	08/21/2000	William Lyle Wiley	1151a	8025

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EXAMINER

TON, ANTHONY T

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/642,722

Applicant(s)

WILEY ET AL.

Examiner

Anthony T Ton

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 and 5. 6) ☐ Other: _____

DETAILED ACTION

Drawing Objections

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because the following reference characters:

a) **Figure 5:** reference character “502” has been used to designate both an ATM interconnecting unit and a signaling processor (see page 32 lines 7 and 17 of the specification for such designators).

b) **Figure 6:** reference character “602” has been used to designate both an ATM interconnecting unit and a signaling processor (see page 35 lines 8 and 17 of the specification for designators).

2. The drawings are objected to because of the following minor informalities:

c) **Figure 8:** refer to page 43 lines 7-9 of the specification, it is suggested to add a term “TABLE” right after of the existing terms such as “TRUNK CIRCUIT”, “TRUNK GROUP”, etc. of each box (box 802 – box 812) to be complied with the specification.

d) **Figure 9:** refer to page 44 line 20 – page 45 line 9 of the specification, it is suggested to add a term “TABLE” right after of the existing terms such as “TRUNK CIRCUIT”, “TRUNK GROUP”, etc. of each box (box 802 – box 908) to be complied with the specification.

e) **Figure 16:** refer to page 49 lines 25-26 of the specification, it is suggested to add a term “IINDICATOR” right after the term “CAUSE VALUE” on the header of the 5th column to be complied with the specification

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification Objections

3. The disclosure is objected to because of the following minor informalities:

- a) Page **9** line 3: it is suggested to change term “communicate” to “communicates” to comply with the subject of a signaling processor.
- b) Page **9** lines 15, 17, 19, 21, 23, 25 and 27, and Page **10** lines 2 and 4: term “**Fig. 8**” should be changed to “**Fig. 7**” since the “the signaling processor” is referring to Figure 7 only.
- c) Page **15** line 17: it is suggested to change term “and 116 and the SONET” to “and 116 are the SONET” since this is a typo.
- d) Page **28** line 12: it is suggested to change term “connection 118..” to “connection.” since this is a typo.
- e) Page **28** line 4 and page **34** line 3: it is suggested to change term “**DSO**” to “**DS0**” since this is a typo.
- f) Page **32** line 16: it is suggested to change term “control interface 502” to “control interface 504” to comply with the Drawings shown in Figure 5.
- g) Page **38** line 1: it is suggested that a **Serial Number** of the US Patent Application, which is entitled “Telecommunication System” should be provided.

h) Page **45** line 12: term "**Figures 14-21**", which are used to depict examples of the various tables shown in figures 8 and 9. However, figures **18-21** do not exist in the Drawings. Only **Figures 1-17** are shown in the Drawings.

i) Page **49** line 11: term "**Figures 14-19**", which are used to depict examples of the various tables shown in figures 8 and 9. However, figures **18-19** do not exist in the Drawings. Only **Figures 1-17** are shown in the Drawings.

Appropriate correction is required.

Abstract Objections

4. The disclosure is objected to because of the following minor informalities:

It is suggested to change term "connects" in line 2 to "connect" to comply with the subject of "A system and method".

Appropriate correction is required.

Claim Objections

5. Claims **10** and **26** are objected to under 37 CFR 1.75 as being a substantial duplicate of claims **9** and **25**, respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

6. Claims **6** and **22** are objected because the claimed limitation of “an international network” cited in lines 2-3 for claim 6 and in line 2 for claim 22 is not properly; there is no any explanation in the specification that supports for such a claimed limitation.

Claim Rejections - 35 USC § 112, 2nd Paragraph

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claim **1-32** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) Claim **1** is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: term “**the asynchronous communications**” in line 16 is not cooperative with term “**the user communications**” cited in line 15 since the term “the asynchronous communications” in line 15 was converted into the term “the user communications”. Therefore, the “the user communications” (not “the asynchronous communications”) should be transferred by a second asynchronous communication system over the second connection in response to the second message.

b) Claims **2-16** recite the limitation “**The communication system**” in line 1. There is insufficient antecedent basis for this limitation in the claim.

c) Claim 17 recites the limitation "**the optical ring**" in line 20. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims **1-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Doshi et al. (US 6,324,179: refer to IDS #5) in view of Self et al. (US 5,495,484: refer to IDS #4).

a) **Regarding to claim 1:** Doshi et al. disclosed an ATM network arranged to interface with Synchronous Transfer Mode (STM) in-band signaling comprising:

a signaling processing system (see label 215-1 in Figure 1) configured to receive signaling (see col.3 lines 49-62) identifying a first connection (see path 226 in Figure 1) for a call, process the signaling to select an identifier (see col.2 line 67 – col.3 line 7) and a second connection (see path 70 in Fig.1) indicating the first connection and the identifier, and transfer a second message indicating the identifier and the second connection (see col.4 lines 51-61);

a first asynchronous communication system (see the combination of labels 25, 205 and 210) configured to receive user communications (col.1 lines 44-49) for the call and the first message, interwork the user communications into asynchronous

communications in response to the first message (see col.10 lines 12-15), and transfer the asynchronous communications based on the identifier (col.7 lines 64-66); and

a second asynchronous communication system configured to receive the asynchronous communications and the second message (see the combination of labels 50, 225 and 230), interwork the asynchronous communications into the user communications based on the identifier (see col.8 lines 4-14), and transfer the user communications over the second connection in response the second message (see col.8 lines 9-14).

Based on the disclosures above, Doshi et al. showed all subject matters of the claimed invention of Claim 1 except for an optical network configured to receive the asynchronous communications from the first asynchronous communication system and transfer the asynchronous communications over an optical ring. However, Self et al. disclosed such an optical network (see Fig.1). Therefore, it would have been obvious to one of ordinary skill in the art to provide such an optical network of Doshi et al., as taught by Self et al., so that ATM cells can be arranged to broadband frames and transferred over an optical ring for faster deliveries to make network become more efficient (see the motivation of Doshi et al. at col.11 lines 23-27).

b) **Regarding to Claim 2:** Doshi et al. did not explicitly teach the identifier identifies an asynchronous connection provisioned from the first asynchronous connection system through the optical network to the second asynchronous connection system before the call. However, Doshi et al. implicitly teach links connected to the signaling processor for identifying the asynchronous connection before the call (see

links 26, 151, 152, 153, and 51). Therefore, it is inherent that Doshi et al. teach the claimed limitation except for the optical network as described above in the Claim 1.

c) **Regarding to Claims 3, 4 and 6:** Doshi et al. did not clearly teach the network comprising a metropolitan area network (taught by claim 3) and local area network (taught by claim 4 or may be a WAN for claim 6). However, such networks are well known and accepted as standard in the subject matter area of the invention. Therefore, it would have been obvious to include in such networks in Doshi et al. as taught by the Applicant since such networks are well known in the environment of the invention and would make Doshi et al. more services.

d) **Regarding to Claim 5:** as the claim 1, wherein the first connection is coupled to a LAN (as described in claims 3, 4 and 6 above), and the second connection is coupled to an interexchange network (see col.2 lines 4-43 and col.4 lines 56-61).

e) **Regarding to Claim 7:** as the claim 1, wherein the signaling comprises SS7 signaling (see col.3 lines 49-62).

f) **Regarding to Claim 8:** as the claim 1, wherein the signaling comprises an initial address message(see col.4 lines 43-44).

g) **Regarding to Claims 9 and 10:** as the claim 1, wherein the signaling processing system is configured to process a called number from the signaling to select the identifier and the second connection (see col.2 line 58 – col.3 line 2).

h) **Regarding to Claim 11:** as the claim 1, wherein the signaling processing system is configured to process the signaling to select the identifier and the second connection to provide local number portability (see col.4 lines 20-43).

i) **Regarding to Claim 12:** as the claim 1, wherein the signaling processing system is configured to process the signaling to access a service control point to select the identifier and the second connection (see box 215-2 and the controller inside box 215).

j) **Regarding to Claim 14:** as the claim 1, wherein the signaling processing system is configured to receive and process address complete, answer, release messages for the call (see col.8 line 30 – col.9 line 37)

k) **Regarding to Claim 16:** as the claim 1, further comprising a service platform configured to receive and process the user communications from the second connection to provide tone detection (see col.2 lines 19-24 and col.5 lines 22-32)

l) **Regarding to Claims 13 and 15:** Doshi et al. did not explicitly teach the signaling processing system which is configured to generate billing information, and the claim 1 further comprising a service platform to provide voice messaging. However, Doshi et al. implicitly provided a motivation for special telephone services (see col.1 lines 62 – col.2 line 4). Therefore, it would have been obvious to include in such billing information and voice messaging in Doshi et al. as taught by the Applicant since such claimed limitations are well known in the environment of the invention that would make the invention of Doshi et al. have more platforms of services.

n) **Regarding to Claims 17- 20, 22, 21, 23-28, 30, 32, 29 and 31:** Doshi et al and Self et al. would apply the rejections in the claims 1-4, 6, 5, 7-12, 14, 16, 13 and 15 to claims 17- 20, 22, 21, 23-28, 30, 32, 29 and 31 in a method as taught.

Citation of Relevant Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Patent number of the prior art listed below is considered as citation of relevant prior art in the field of the invention relates to telecommunications calls switching and transport: Lewis (US 6,442,169); Madonna (US 6,522,646); Hebert et al. (US 5,920,546); Gradischung (US 5,844,895); Gausmann et al. (US 6,009,100); Medhat et al. (US 6,574,222); Medhat (US 6,496,512); Christie et al. (US 6,639,912 and US 6,535,483); Torrey et al. (US 6,535,599 and US 6,560,226); Nelson et al. (6,563,981); and Howell (US 6,597,701).

Examiner Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony T. Ton whose telephone number is 703-305-8956. The examiner can normally be reached on Monday-Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Olms, can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

ATT


KENNETH VANDERPUYE
PRIMARY EXAMINER